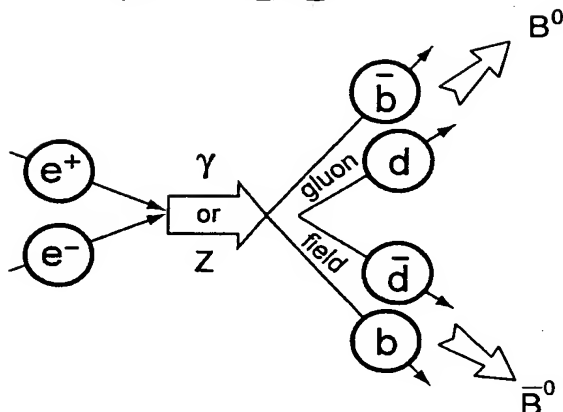


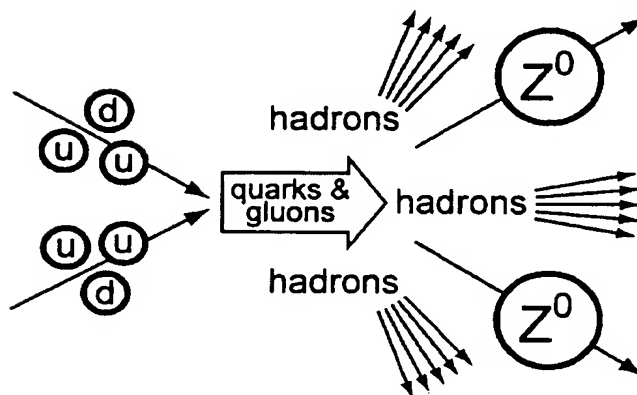
$$e^+e^- \rightarrow B^0 \bar{B}^0$$



An electron and positron (antielectron) colliding at high energy, can annihilate to produce B^0 and \bar{B}^0 mesons via a virtual Z boson or a virtual photon.

FIG. 1A

$$p p \rightarrow Z^0 Z^0 + \text{assorted hadrons}$$



Two protons colliding at high energy can produce various hadrons plus very high mass particles such as Z bosons. Events such as this one are rare but can yield vital clues to the structure of matter.

FIG. 1B

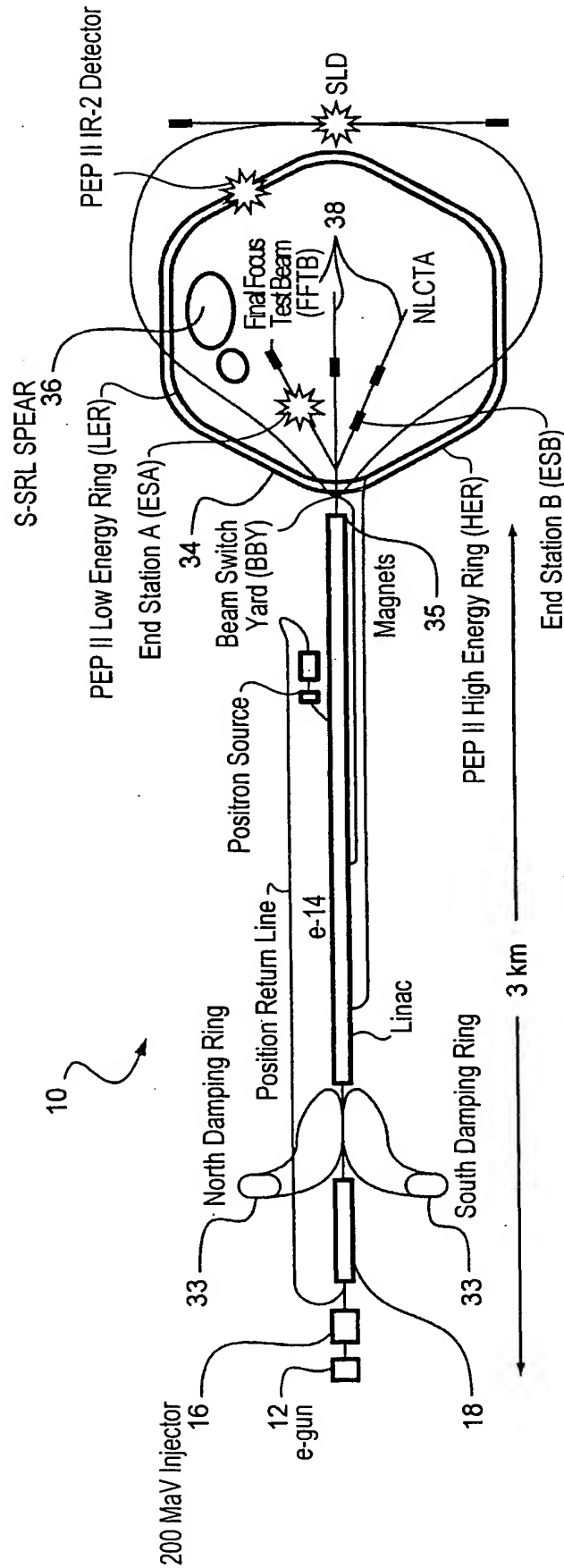


FIG. 2

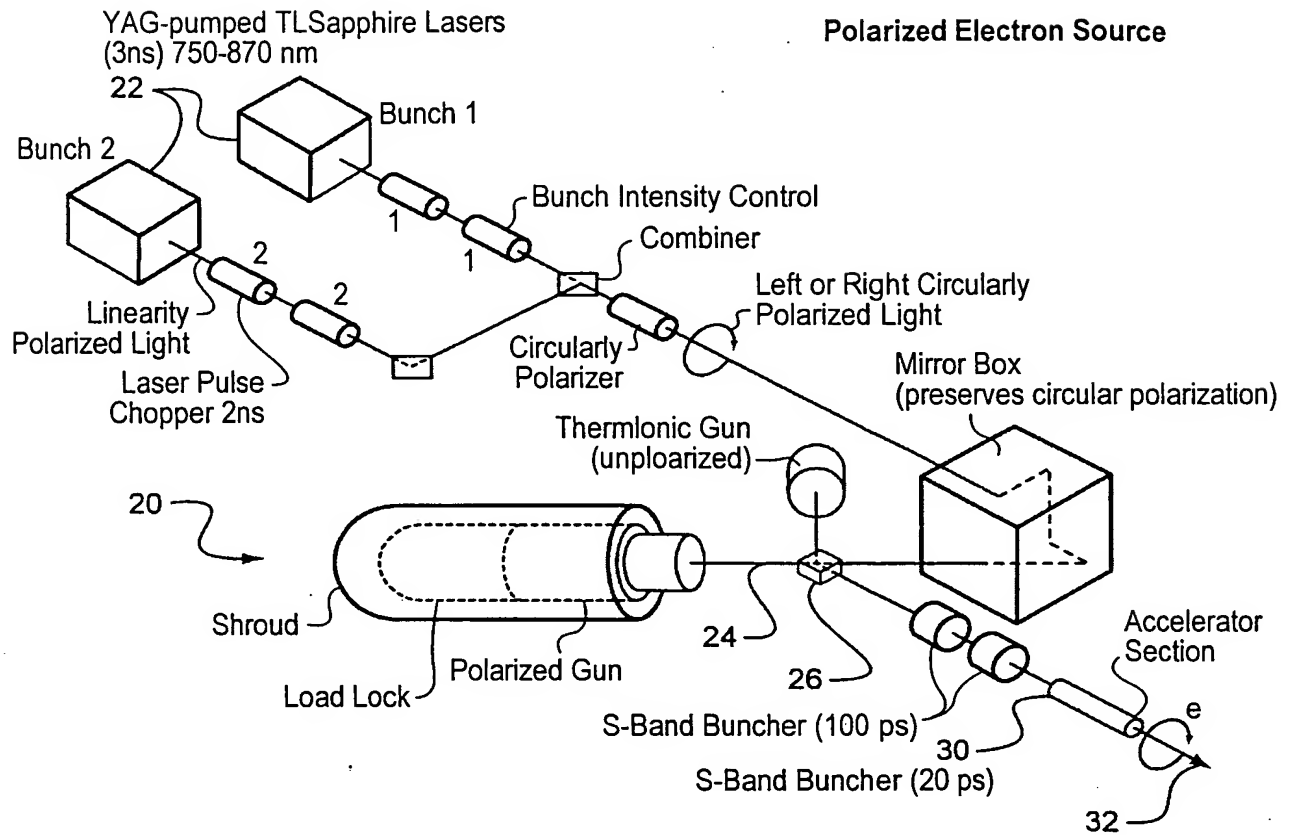


FIG. 3

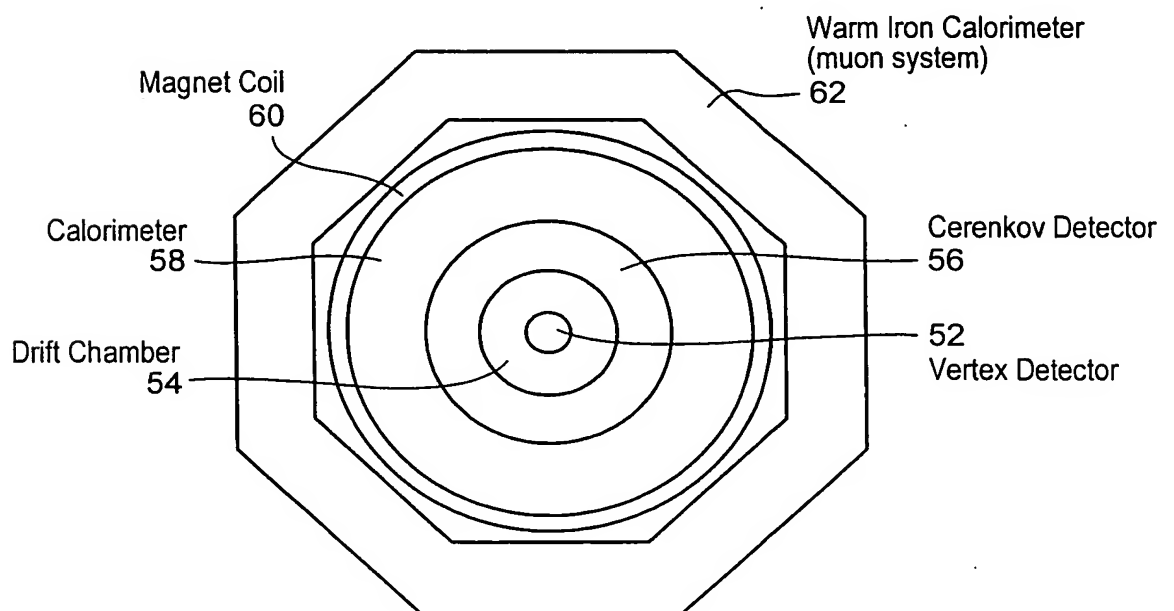


FIG. 4

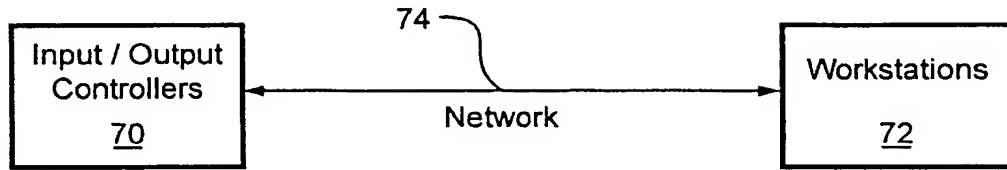


FIG. 5

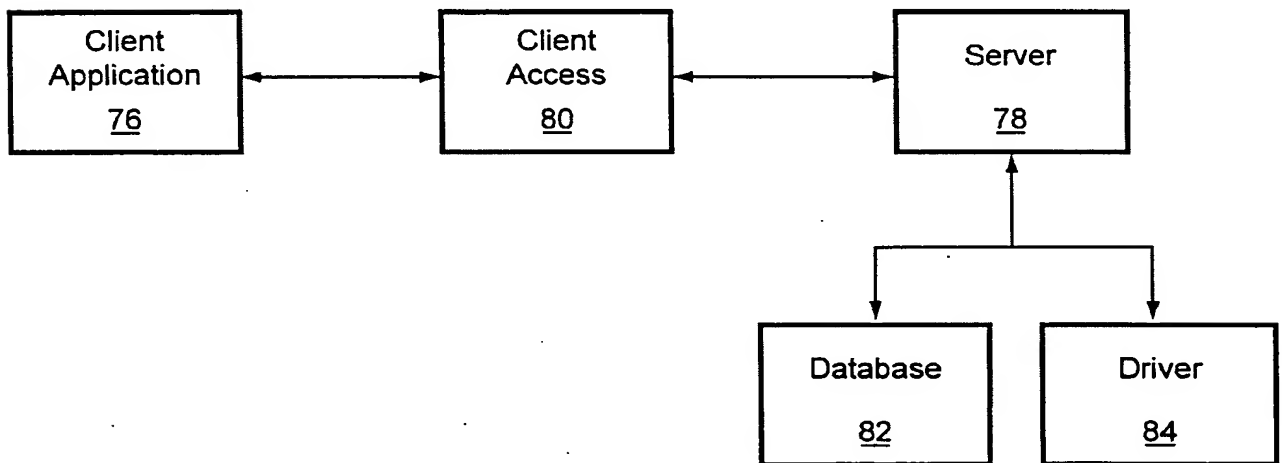


FIG. 6

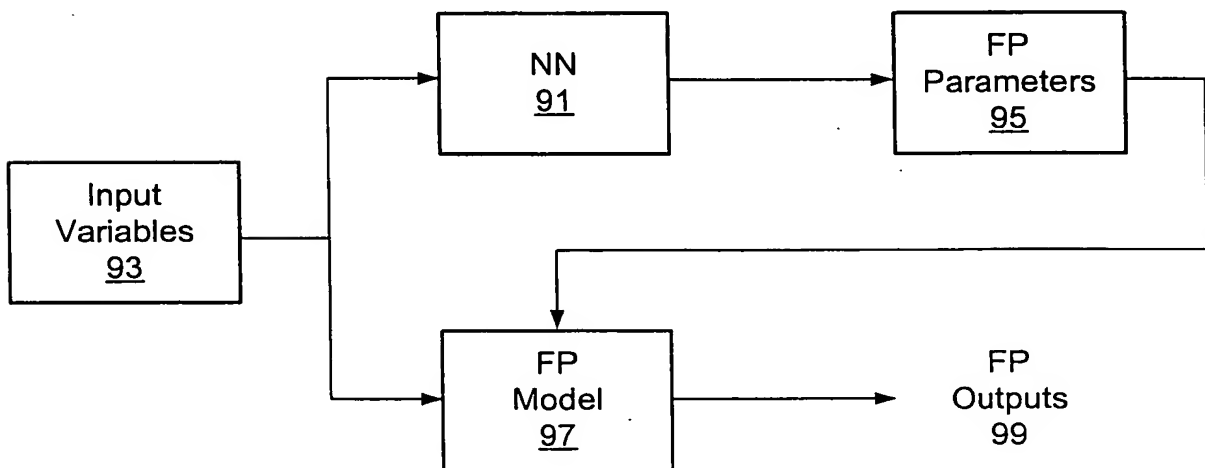


FIG. 7

100

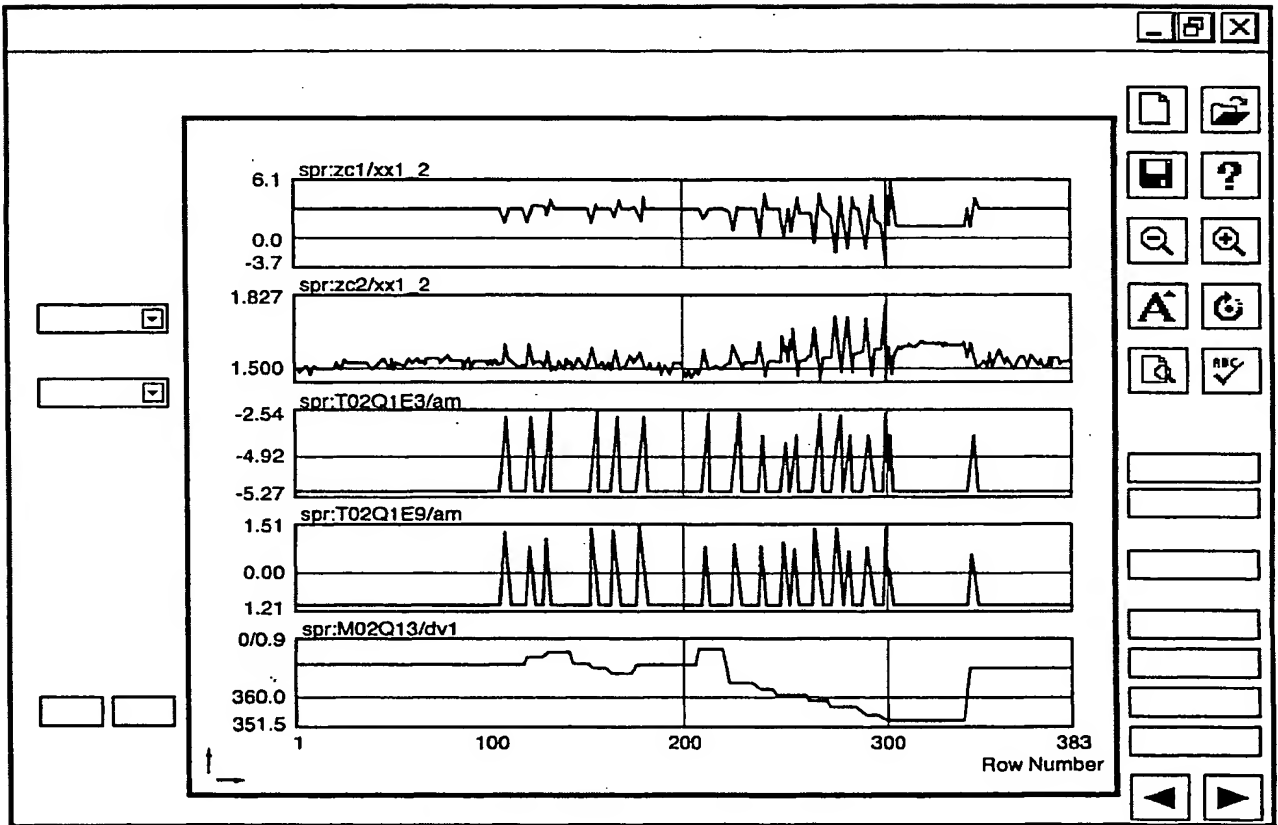


FIG. 8

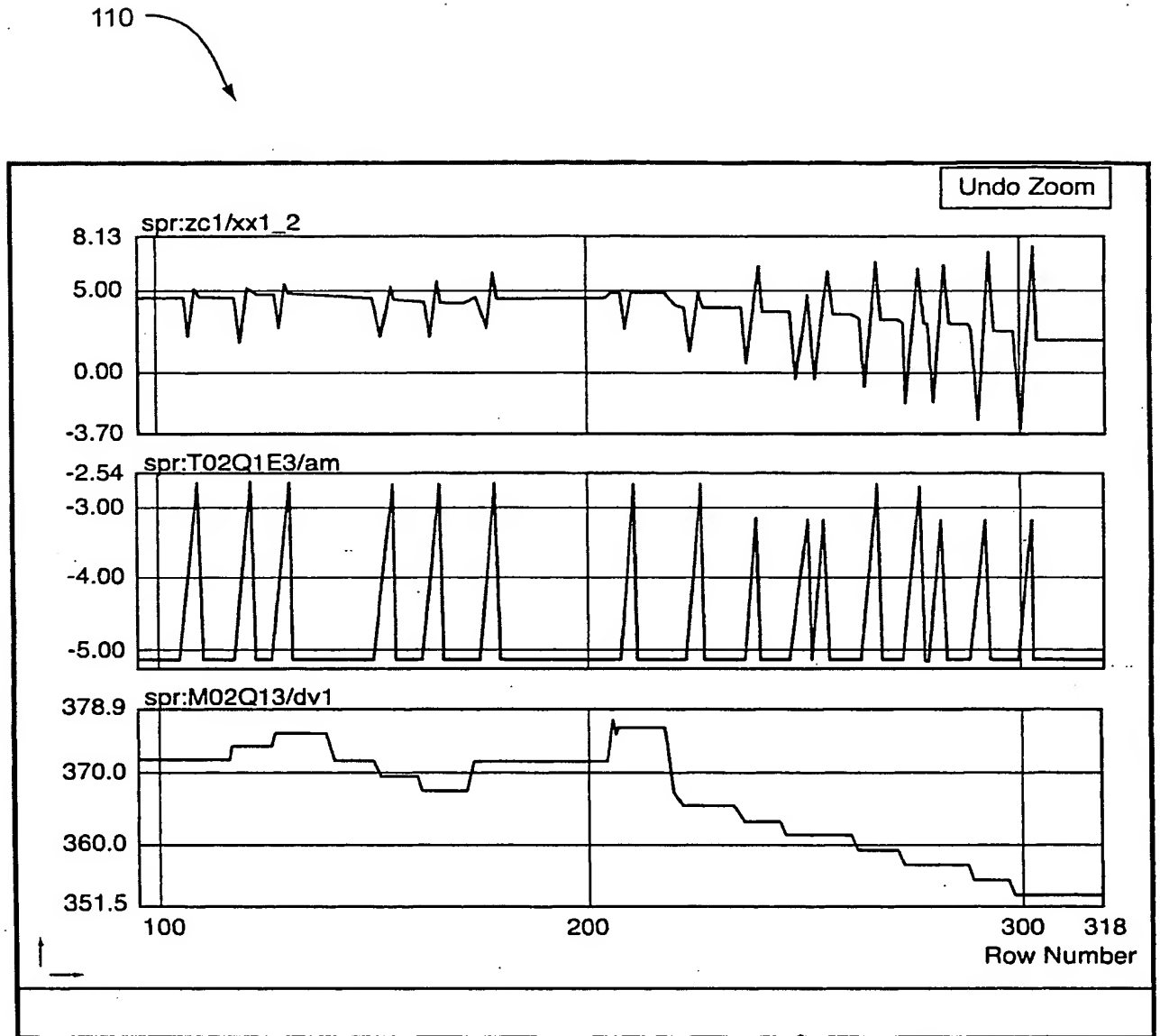


FIG. 9

120

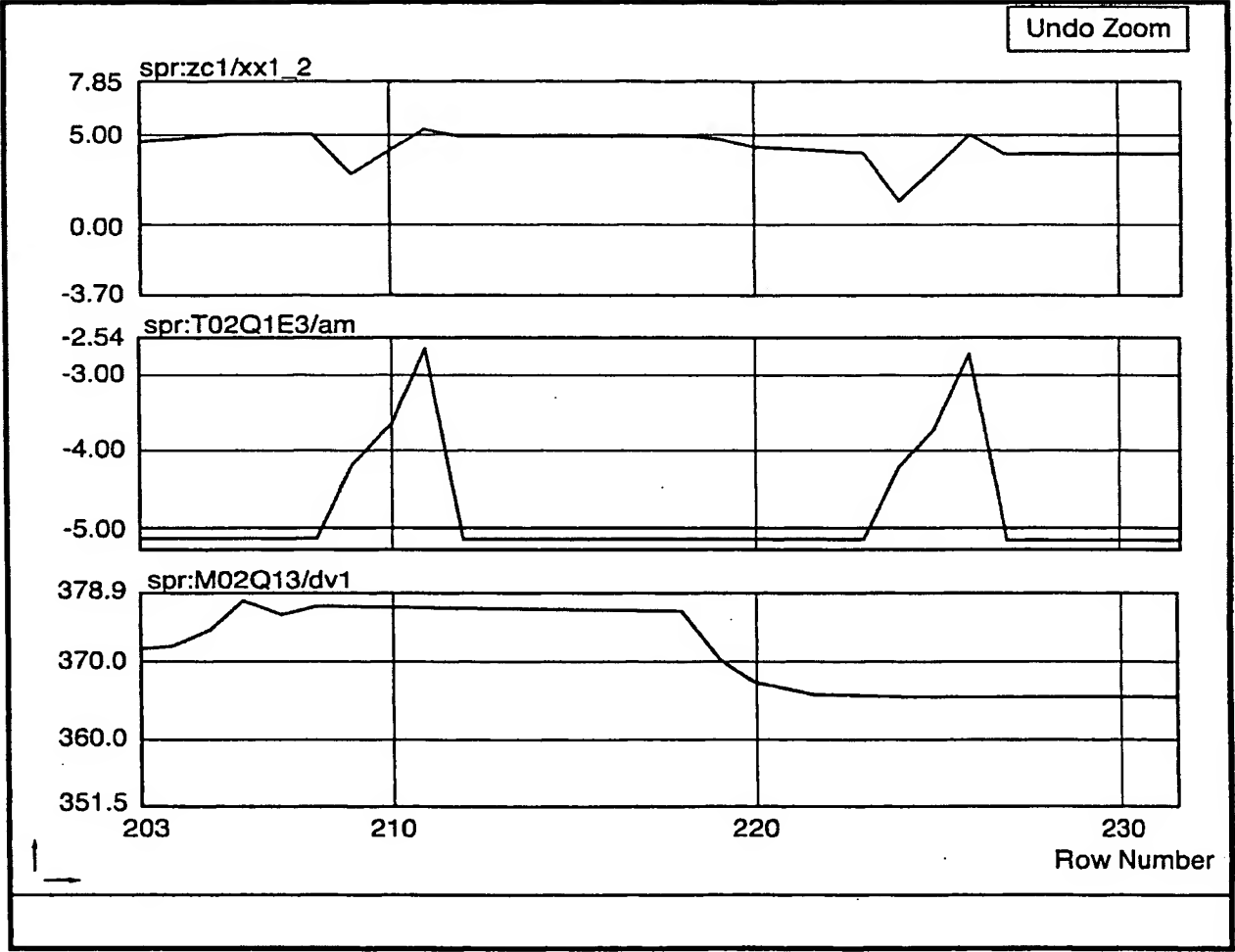


FIG. 10

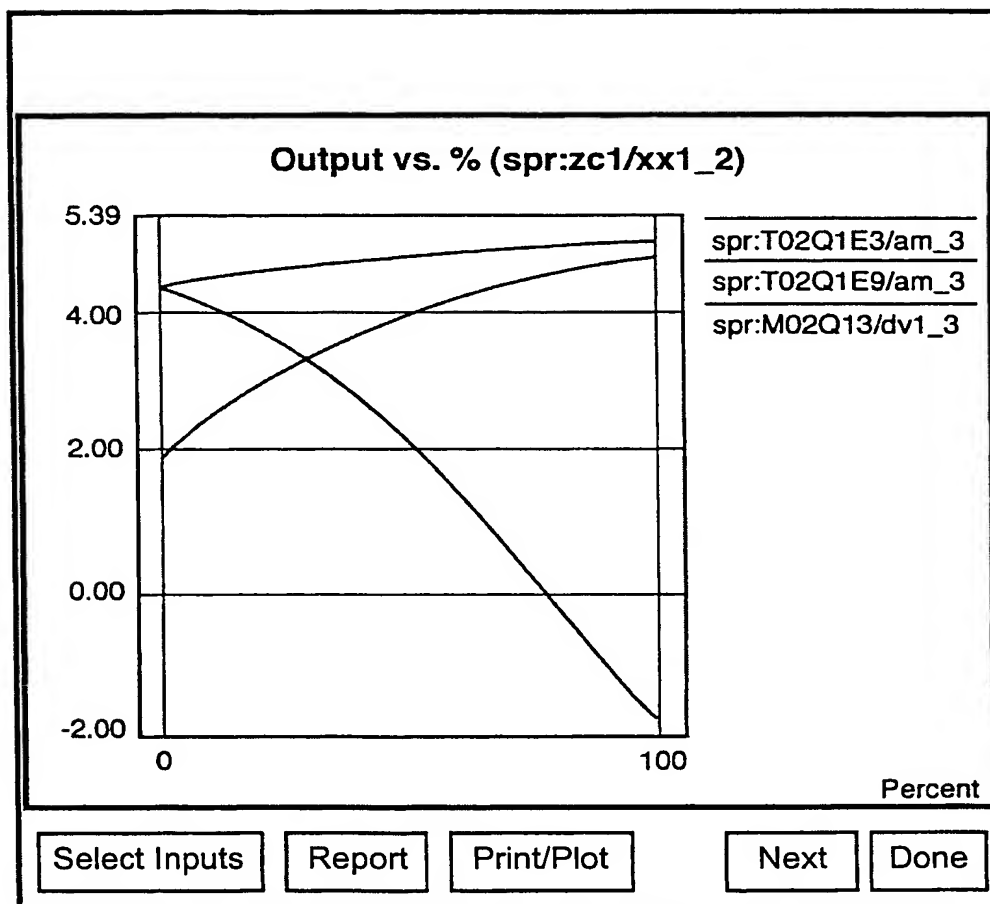


FIG. 11

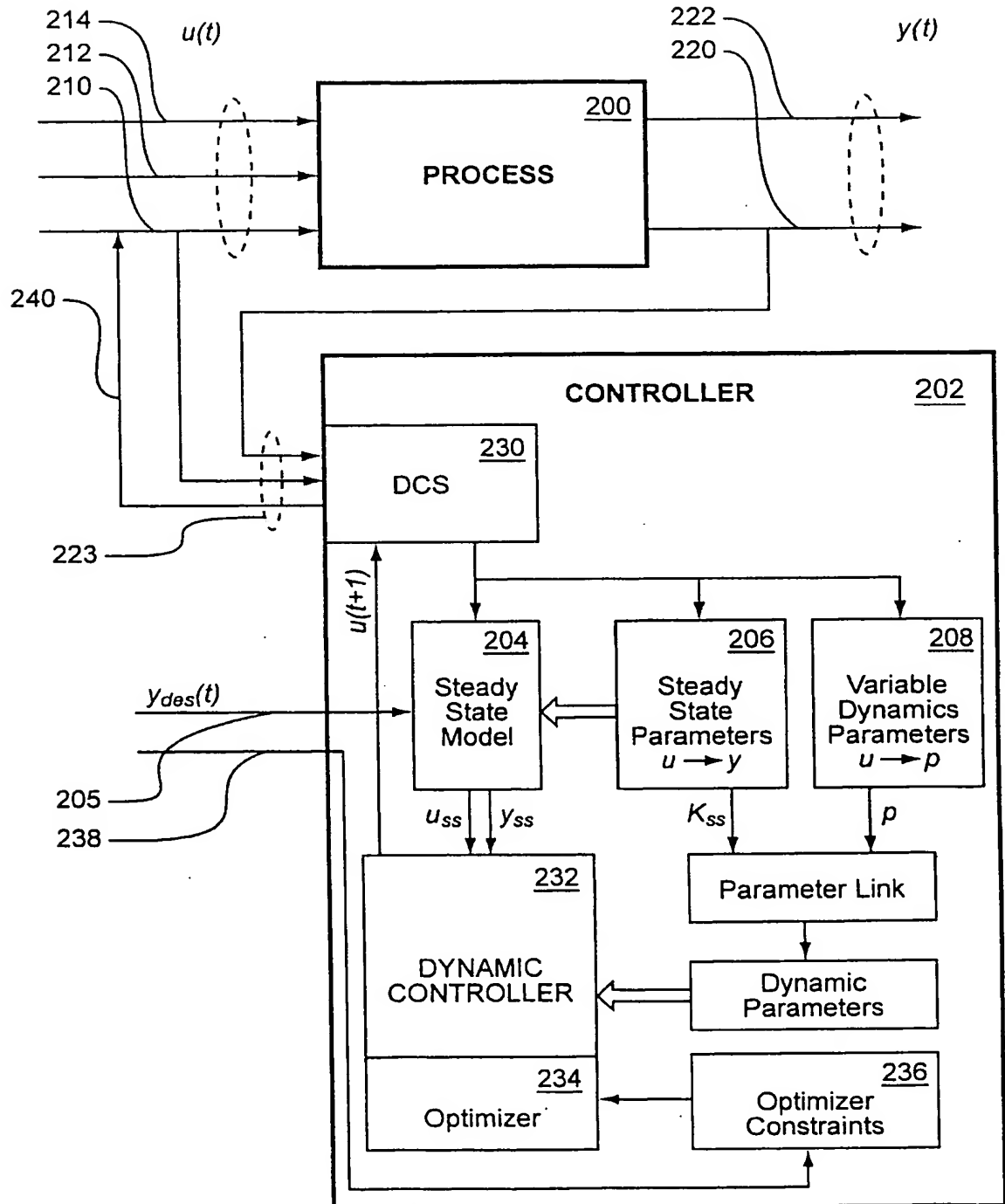


FIG. 12